

Retreatment With Brodalumab Results in Skin Clearance and Improvements in Quality of Life in Patients With Psoriasis After Treatment Interruption

OBJECTIVE

- To present efficacy and health-related quality of life data after brodalumab withdrawal and retreatment

CONCLUSIONS

- Reinitiation with brodalumab after treatment withdrawal led to robust levels of skin clearance recapture; patients returned to their previous levels of responses by 24 weeks
- Improvement in quality of life was maintained after retreatment with brodalumab, regardless of exposure to prior biologic treatment
- These results are relevant to real-life practice given that it is relatively common for patients to stop and restart their medications because of various factors

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SYNOPSIS

- Psoriasis is a chronic inflammatory skin disease that negatively impacts quality of life, leading to significant physical and emotional burden¹
- Brodalumab is a fully human interleukin-17 receptor A antagonist approved for the treatment of moderate-to-severe plaque psoriasis in adult patients with inadequate response or loss of response to other systemic therapies²
- Treatment interruption is a common real-world experience in individuals with psoriasis³

METHODS

- In a double-blind, placebo-controlled study (NCT01708590; AMAGINE-1),⁴ patients with moderate-to-severe psoriasis were randomized to brodalumab 210 mg or placebo every 2 weeks (Q2W)
- At week 12, patients receiving brodalumab who achieved a static physician's global assessment (sPGA) of 0 or 1 were rerandomized to their induction dose of brodalumab or placebo
- Beginning at week 16, all rerandomized patients who experienced return of disease (sPGA ≥ 3) qualified for retreatment and received an induction dose of brodalumab
- Efficacy was assessed by observed psoriasis area and severity index (PASI) response
- Health-related quality of life was evaluated with the dermatology life quality index (DLQI) in the retreatment group (N=79) using nonresponder imputation (NRI), stratified by disease response to previous biologic treatment before entering the study (prior biologic failure [n=18]; prior biologic nonfailure [n=61])

RESULTS

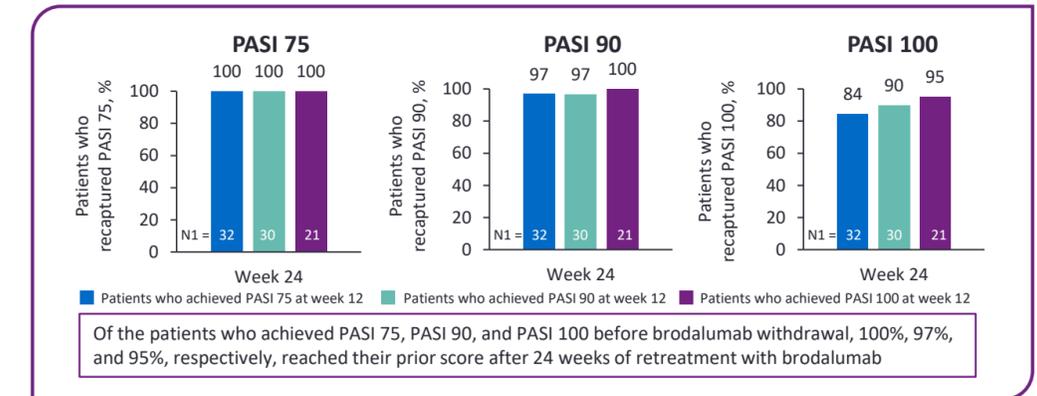
Efficacy

- A total of 79 patients randomized to brodalumab 210 mg Q2W in the induction phase and rerandomized to placebo in the withdrawal phase experienced return of disease (retreatment group)
- Most patients with psoriasis who experienced a return of disease after brodalumab withdrawal returned to their previous levels of PASI response after 24 weeks of retreatment with brodalumab (Figure 1)

Health-related quality of life

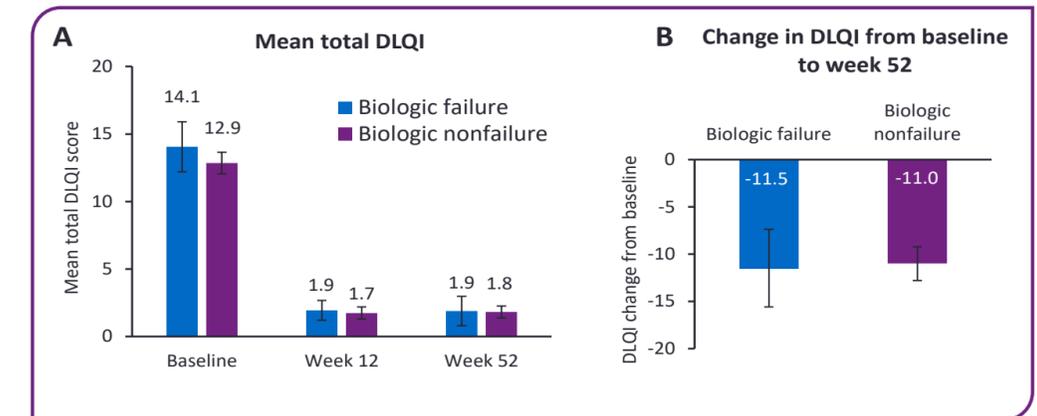
- Mean (SE) DLQI scores in patients in the brodalumab retreatment population at baseline (prior biologic failure, 14.1 [1.9]; prior biologic nonfailure, 12.9 [0.8]) improved at week 52 (prior biologic failure, 1.9 [1.1]; prior biologic nonfailure, 1.8 [0.4]), similar to DLQI scores achieved during the induction phase at week 12 (Figure 2A)
 - Change in DLQI from baseline to week 52 for the prior biologic failure and nonfailure subgroups were -11.5 (95% CI, -15.6 to -7.4) and -11.0 (95% CI, -12.8 to -9.2), respectively (Figure 2B)
 - No significant differences in DLQI were observed by prior biologic response through week 52 ($P > 0.05$ between subgroups)

Figure 1. PASI 75, PASI 90, and PASI 100 rates after 24 weeks of retreatment with brodalumab 210 mg Q2W in patients randomized to brodalumab 210 mg Q2W in the induction phase and rerandomized to placebo in the withdrawal phase.



Observed data analysis. N1, number of patients who entered retreatment phase and had a valid measurement value at the specified week while in the retreatment phase; PASI 75, 90, and 100, psoriasis area and severity index 75%, 90%, and 100% improvement; Q2W, every 2 weeks.

Figure 2. (A) Mean total DLQI and (B) change in DLQI from baseline to week 52 for patients in the brodalumab retreatment group by response to prior biologic treatment. Error bars are (A) SE and (B) 95% CI.



Nonresponder imputation. DLQI, dermatology life quality index.

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References: 1. Aldredge and Higham. *J Dermatolog Nurses Assoc.* 2018;10:189-197. 2. Siliq [package insert]. Bausch Health US, LLC; 2017. 3. Lebwohl et al. *J Drugs Dermatol.* 2020;19:384-387. 4. Papp et al. *Br J Dermatol.* 2016;175:273-286.